



June 26, 2008

US EPA RECORDS CENTER REGION 5



472210

Stephen F. Nightingale, P.E.  
Permit Section Manager  
Illinois Environmental Protection Agency  
Bureau of Land  
1021 North Grand Avenue East  
Springfield, Illinois 62794-9276

Re: Winnebago Landfill  
Winnebago County – 2018080001  
Addendum to Log No. 2007-181

Dear Mr. Nightingale:

On behalf of our client, William Charles Waste Companies (WCWC), submitted herein are an original and three copies of an addendum to Log No. 2007-181. This addendum provides revised Groundwater Management Zone (GMZ) extent maps and an investigation plan for the area west of the GMZ boundary, as discussed in the April 9, 2008 meeting between Illinois EPA, Andrews Engineering and WCWC personnel.

#### **Revised GMZ Extent**

Pursuant to an Illinois EPA request during the April 9, 2008 meeting, the GMZ extent maps have been revised. Figure 1 illustrates the revised boundaries for both the upper and lower zones of the GMZ. The original upper zone GMZ extent included three separate areas: the area directly downgradient of the North Unit, a small area around well G37S and an area west of Killbuck Creek that included wells G34S and G35S. The revised maps consolidate all three areas into one contiguous GMZ zone, as shown in Figure 1. The original lower zone GMZ extent included four separate areas: the area directly downgradient to the northwest of the North Unit that included wells G41M and G39S, a smaller area directly downgradient to the west of the North unit that includes well G38S, a small area west of Killbuck Creek that includes G34D and another small area west of Killbuck Creek surrounding well G16M. The revised maps consolidate the areas west of Killbuck Creek with the area northwest of the North Unit, as shown in Figure 1. The revised extents incorporate all areas exhibiting concentrations above the permitted backgrounds and represent the furthest extent of those elevated concentrations. It should be noted that "clean" areas (areas where concentrations of the GMZ parameters are below the permitted background values) exist within the revised GMZ extents. The revised GMZ boundaries do not constitute an increase in the size of the GMZ.

#### **Proposed GMZ Investigation**

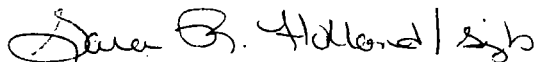
Although significant decreases in the GMZ extent and GMZ parameter concentrations have been demonstrated, the Illinois EPA has requested further characterization of the western boundary of the GMZ. The following investigation plan incorporates the results of the April 9 meeting and will be implemented within 90 days of approval of Log No. 2007-181.

Four investigation locations, T1-T4, have been selected along the western edge of the GMZ, as illustrated in Figure 2. Each boring will be extended to the top of the bedrock surface. Discreet groundwater samples will be collected from the upper and lower GMZ zones at each boring location. The samples will be analyzed for the GMZ parameters.

The results of the investigation will be submitted to the Illinois EPA in the form of a significant modification permit application within 180 days of approval of Log No. 2007-181. The application will include a summary of the investigation, boring logs for each investigation location and sample results. If sample results indicate concentrations above the permitted backgrounds, then recommendations for further investigation will be included in the application. If all the sample results are below the permitted background values then a proposal for the installation of a minimum of one compliance boundary well for each GMZ zone will be included.

If you have any questions or require additional information, please Tom Hilbert at (815) 963-7516.

Sincerely,

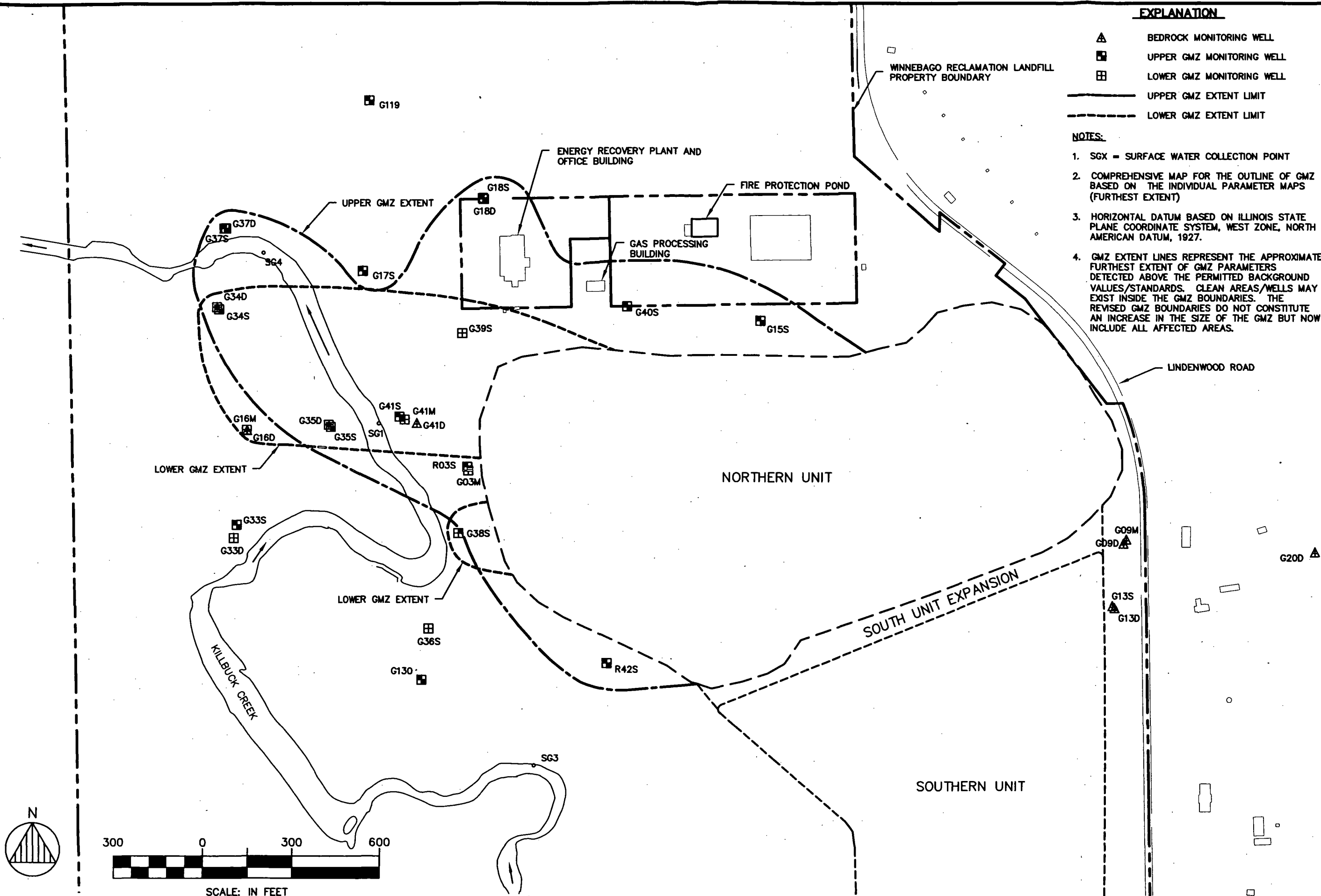
A handwritten signature in cursive script, appearing to read "Sara R. Holland / sjb".

Sara R. Holland  
Hydrogeologist

SRH:sjb

cc: Tom Hilbert – William Charles Waste Companies  
Bernie Schorle – USEPA, Region 5 /

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**EXPLANATION**

- ▲ BEDROCK MONITORING WELL
- UPPER GMZ MONITORING WELL
- ▣ LOWER GMZ MONITORING WELL
- UPPER GMZ EXTENT LIMIT
- - - LOWER GMZ EXTENT LIMIT

**NOTES:**

1. SGX = SURFACE WATER COLLECTION POINT
2. COMPREHENSIVE MAP FOR THE OUTLINE OF GMZ BASED ON THE INDIVIDUAL PARAMETER MAPS (FURTHEST EXTENT)
3. HORIZONTAL DATUM BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM, 1927.
4. GMZ EXTENT LINES REPRESENT THE APPROXIMATE FURTHEST EXTENT OF GMZ PARAMETERS DETECTED ABOVE THE PERMITTED BACKGROUND VALUES/STANDARDS. CLEAN AREAS/WELLS MAY EXIST INSIDE THE GMZ BOUNDARIES. THE REVISED GMZ BOUNDARIES DO NOT CONSTITUTE AN INCREASE IN THE SIZE OF THE GMZ BUT NOW INCLUDE ALL AFFECTED AREAS.

**ANDREWS ENGINEERING, INC.**  
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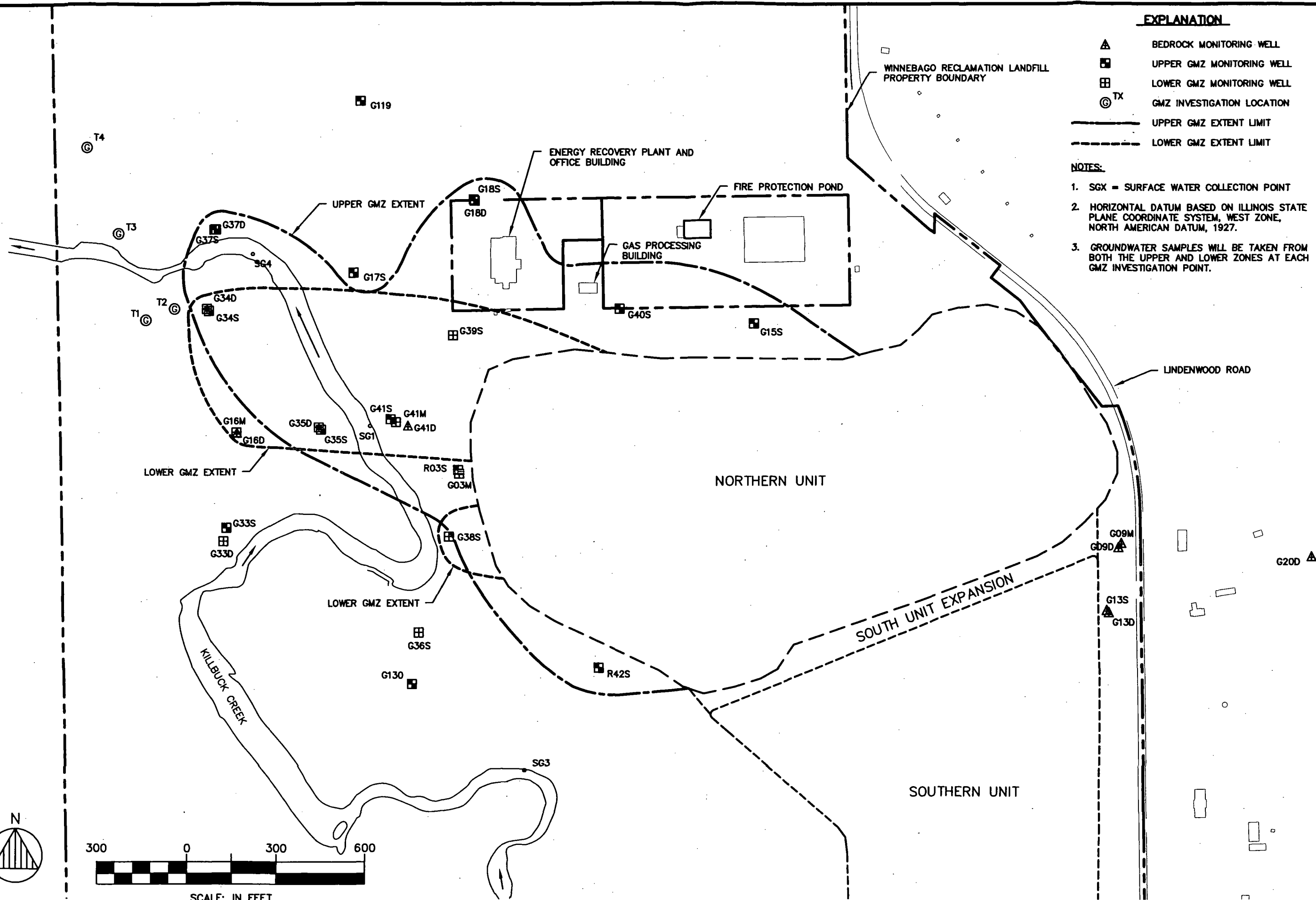
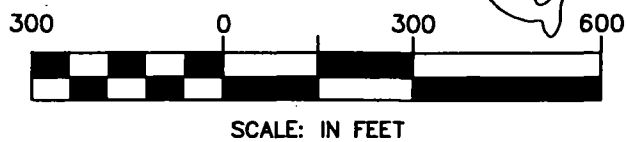
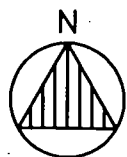


**GMZ EXTENT MAP - REVISED**  
PLANS PREPARED FOR  
**WINNEBAGO RECLAMATION SERVICE, INC.**  
ROCKFORD, WINNEBAGO COUNTY, ILLINOIS

DATE: APRIL 2008  
PROJECT ID: 90-114  
SHEET NUMBER:

**FIG. 1**

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#### EXPLANATION

- BEDROCK MONITORING WELL
- UPPER GMZ MONITORING WELL
- LOWER GMZ MONITORING WELL
- GMZ INVESTIGATION LOCATION
- UPPER GMZ EXTENT LIMIT
- LOWER GMZ EXTENT LIMIT

#### NOTES:

1. SGX = SURFACE WATER COLLECTION POINT
2. HORIZONTAL DATUM BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM, 1927.
3. GROUNDWATER SAMPLES WILL BE TAKEN FROM BOTH THE UPPER AND LOWER ZONES AT EACH GMZ INVESTIGATION POINT.

#### GMZ INVESTIGATION MAP

PLANS PREPARED FOR  
**WINNEBAGO RECLAMATION SERVICE, INC.**  
ROCKFORD, WINNEBAGO COUNTY, ILLINOIS

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APRIL 2008

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**FIG. 2**

**ANDREWS**  
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APPROVED BY: SRH

DESIGNED BY: SRH

DRAWN BY: LE